



NOT FOR PUBLICATION

INTERMOUNTAIN FOREST AND RANGE EXPERIMENT STATION

FOREST SERVICE, U. S. DEPARTMENT OF AGRICULTURE

Ogden, Utah

Reed W. Bailey, Director

Action	Initial
Moncrief	<i>[Signature]</i>
Fryman	<i>[Signature]</i>
Greenbach	<i>[Signature]</i>
Conner	<i>[Signature]</i>
Bishop	<i>[Signature]</i>
Ward	<i>[Signature]</i>
Isaac	<i>[Signature]</i>
Payne	
Tid Clerk	

Control
Insect
✓ Challis

Challis National Forest
Annual Aerial Survey
August - September 1957

*Copies sent supervisor
and wingers 12/30/57*

By

W. E. Cole - W. E. Mineau
Entomologists

Prepared by

Division of Forest Insect Research

Boise Research Center
Boise, Idaho

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CHALLIS NATIONAL FOREST
ANNUAL AERIAL SURVEY
August - September 1957

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Entomologists

INTRODUCTION

The annual aerial survey of the Challis National Forest was conducted on August 26 to 29, and September 16 to 17 and 24, 1957. Flights were made in the same manner as in the past to cover all forested areas by drainages. Where aerial observations indicated abnormal conditions further checks were made on the ground wherever possible. The purpose of this survey was to observe any unusual forest insect activity and appraise its significance.

For the past few years the Challis National Forest has presented no serious insect problems. Areas of budworm infestations on this forest that were adjacent to the areas sprayed during past control projects have also been sprayed. However, these areas have been less than 25,000 acres. The only other exception has been an endemic budworm situation around Cape Horn Guard Station.

Losses due to bark beetles have been no worse than an endemic annual drain with no outbreaks occurring within recent years.

Aerial observations were made at an altitude which offered the best observation in the safest manner. The description of infested areas was noted on a voice recorder and plotted on a 1/4-inch scale map.

RESULTS

These areas are keyed on the attached map and their descriptions are as follows:

Area A. Loon Creek drainage. Two small areas of 6,400 acres of light to medium budworm damage were found west of Loon Creek Peak and in Deer Creek west of Pinyon Peak. These infestations are approximately 1 year old.

The fir engraver beetles have caused endemic losses at the head of Rock Creek, below Sleeping Deer Mountain and along Mahoney Creek.

^{1/} Forestry Aid--research

Area B. Camas Creek drainage. Along the upper half of the West Fork of Camas Creek and Woodtick Creek there appeared to be a spider mite infestation. This aerial report was not verified by a ground survey. However, the Douglas-fir trees had all the evidence of such. These areas total approximately 6,100 acres in size.

Endemic situations of alpine fir engravers were found scattered throughout the headwaters of the South Fork of Camas River, J. Fell Creek, Furnace Creek, and at the base of White Goat Mountain.

Area C. This area includes some 3,700 acres of light to medium budworm damage between Sheepeater Hot Springs and the mouth of Rapid River. This infestation has probably moved across the river from the area sprayed on the Boise National Forest in 1956, and is 1 to 2 years old.

Area D. Area D extends from Beaver Creek, north of Cape Horn, to the Middle Fork of the Salmon River and including Big Soldier Mountain. About 6,200 acres of an unknown alpine fir defoliator were mapped including portions of Beaver, Fall and Marsh Creeks.

Area E. Approximately 8,100 acres of light to medium budworm damage were located between the heads of Basin and Valley Creeks. This infestation has been present for 2 to 3 years and has remained static in size and severity.

Area F. Area F includes that area on the west side of Stanley Basin from the head of Cape Horn Creek to Stanley, Idaho.

A small area of some 4,000 acres infested with spider mites was found around Bull Trout Lake and up Bench Creek. The area around Bull Trout Lake was sprayed for budworm in 1955.

Some 15,900 acres of damage by an unknown defoliator on alpine fir were mapped covering from the headwaters of Banner Creek, Elk Creek, Crooked Creek and Iron Creek.

The alpine fir engraver was found rather scattered throughout all drainages.

SUMMARY

Approximately 18,200 acres of light to medium budworm damage were mapped on the Challis National Forest. These areas are widely separated and appear to be static. However, the number of infestations represent a slight increase over 1956 and will bear watching in the future.

Two areas of spider mite infestations were located. One of these lies within or adjacent to an area sprayed for budworm in 1955. The other area was not confirmed on the ground and since this latter infestation was the only one found outside of a previously sprayed area it is possible that the cause may be something other than spider mites.

All bark beetle losses remain static at an endemic level.

Table 1. Acreage and degree of severity of insect damage on the
Challis National Forest

Area	Defoliator	Acreage of defoliation			Total
		Light	Medium	Heavy	
A	Budworm	3,100	3,300	--	6,400
B	Spider Mite	6,100	--	--	6,100
C	Budworm	--	3,700	--	3,700
D	Unknown defoliator A.F.	6,200	--	--	6,200
E	Budworm	8,100	--	--	8,100
F	Unknown defoliator A.F.	15,900	--	--	15,900
	Spider mite	4,000	--	--	4,000
	Total budworm	11,200	7,000	--	18,200
	Total unknown	22,100	--	--	22,100
	Spider mite	10,100	--	--	10,100



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

CHALLIS NATIONAL FOREST

SALMON RIVER DIVISION

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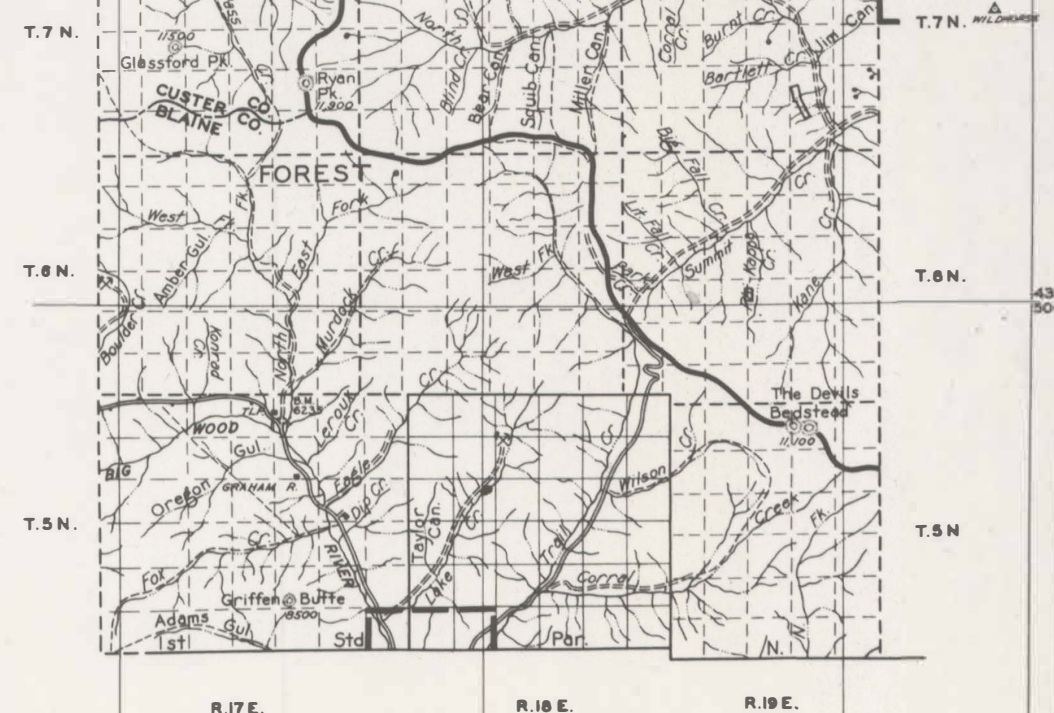
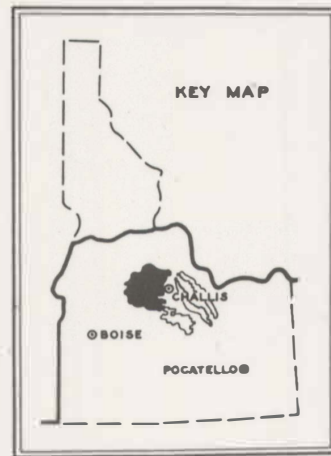
BOISE MERIDIAN

1952

SCALE 1:25,000

LEGEND

- BUDWORM INFESTED AREAS
 - L LIGHT
 - M MEDIUM
 - H HEAVY
- FIR ENGRAVER
- UNKNOWN DEFOLIATOR ON ALPINE FIR
- SPIDER MITE INFESTED AREA



FOREST SERVICE MAP CLASS E
COMPILED AT REGIONAL OFFICE, OGDEN, UTAH 1940,
FROM U.S.G.S. 61-C, FOREST SERVICE AND
OTHER SURVEYS BY H.W. FRANKSON
REVISED 1952 BY C. SPARKS

POLYCONIC PROJECTION
1927 NORTH AMERICAN DATUM